

**REMARKS/ARGUMENTS**

Applicants<sup>S</sup> thank the Examiner for the thorough consideration given the present application. Claims 1-5, 7, 8, and 10-30 are pending in the present application. Claims 1, 12, 16, and 25 are independent claims. Claims 1, 11, 12, 16, 24, and 25 have been amended. Claims 29 and 30 are new.

The Examiner is respectfully requested to reconsider his rejections in view of the Amendments and Remarks as set forth hereinbelow.

**Rejection Under 35 U.S.C. § 102**

Claims 1-5, 7, 8, and 10-28 stand rejected under 35 USC 102 as being anticipated by U.S. Patent No. 6,393,188 to Jeong et al. (hereinafter "Jeong"). This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

As amended, independent claims 1, 12, 16, and 25 each recite that the first and second dispersion compensating fibers each have a dispersion-to-dispersion slope ratio (D/S) that is greater than the dispersion-to-dispersion slope ratio associated with the transmission path. Applicants respectfully submit that Jeong fails to disclose such a feature.

Jeong is concerned with compensating for dispersion and dispersion slope for one type of transmission fiber 20, specifically standard single mode fiber (SMF). Jeong discloses a dispersion compensator 40 implemented on between a transmitter 10 and receiver 50 on the SMF 20. The dispersion compensation device 40 of Jeong includes two or more DCFs arranged in a serial configuration. Jeong relies on the fact that the SMF 20 has a ratio of dispersion-to-dispersion slope ranging between 275-295 to choose the type and lengths of DCFs.

In particular, Jeong discloses two approaches for choosing the DCFs in the dispersion compensator, as set forth in the conditions of column 3, line 66 - column 4, line 14. In the first approach, Jeong picks DCFs whose dispersion-to-dispersion slope ratios straddle the range of dispersion-to-dispersion slope ratios (i.e., 275-290) for SMFs. Thus, Jeong chooses a first DCF whose ratio is greater than 300, and a second DCF whose ratio is less than 240. Thereafter, the lengths of each DCF are chosen to provide compensation for the particular dispersion-to-dispersion slope ratio of the SMF being used.

In the second approach, Jeong teaches choosing the DCFs so that a first DCF has a ratio that is less than 240, and a second DCF having a ratio less than or equal to zero. The specific

lengths of these DCFs are then determined to compensate for the specific ratio of the SMF.

Thus, in both approaches disclosed in Jeong, one of the DCFs in the dispersion compensator has a dispersion-to-dispersion slope ratio less than that of the SMF. Thus, Jeong fails to anticipate claims 1 and 16.

Furthermore, Jeong's solutions are not very practicable. As to Jeong's approach of using DCFs whose dispersion-to-dispersion slope ratios straddle the slope of the transmission fiber, DCF suppliers cannot make the dispersion-to-dispersion slope ratio low enough to match many types of transmission fibers. Accordingly, Jeong's first approach is basically limited to an SMF.

As to Jeong's second approach of using a DCF having a ratio less than or equal to zero, in practice, system designers do not have access to DCFs having zero or negative ratios. Thus, this solution is not feasible.

Conversely, the present invention does not have the limitations disclosed by Jeong. Accordingly, as recited in claims 1 and 16, the present invention may utilize different types of transmission fibers than SMF. Also, the claimed invention may be used to compensate for components other than the transmission fiber (e.g., amplifiers, switches, optical

add/drop multiplexers) as discussed in page 7, lines 20-23 of the specification.

Applicants respectfully submit that claims 1, 12, 16, and 25 are allowable at least for the reasons discussed above. Accordingly, Applicants submit that claims 2-5, 7, 8, 10, 11, 13-15, 17-24, and 26-28 are allowable at least by virtue of their dependency on claims 1 and 16.

#### **Conclusion**

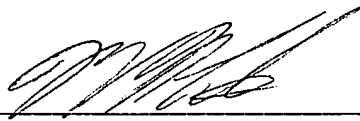
In view of the above amendments and remarks, reconsideration of the rejections and allowance of all of the claims are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Jason W. Rhodes (Reg. No. 47,305) at the telephone number of the undersigned to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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